



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/566,310

07/21/2006

Nigel Titchener

107748

5035

28020

7590

06/11/2008

GRAY, PLANT, MOOTY, MOOTY & BENNETT, P.A.

P.O. BOX 2906

MINNEAPOLIS, MN 55402-0906

EXAMINER

BRAHAN, THOMAS J

ART UNIT

PAPER NUMBER

3654

MAIL DATE

DELIVERY MODE

06/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,310	Applicant(s) TITCHENER ET AL.	
	Examiner Thomas J. Brahan	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-24 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-24 and 28-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3654

1. The following is a quotation of the all of the paragraphs of 35 U.S.C. § 112:

- 1) The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.
- 3) A claim may be written in independent or if the nature of the case admits, in dependent or multiple dependent form.
- 4) Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.
- 5) A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which is being considered.
- 6) An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

2. Claims 28 and 30 are rejected under 35 U.S.C. § 112, second and fourth paragraphs, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as required in the second paragraph and as failing to specify a further limitation of the subject matter claimed, as required by the fourth paragraph. It is unclear as to how claims 28 and 30 further limit the claimed invention, i.e., a method of enhancing safety of a stairlift, as these claims do include any method step limitations.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised

Art Unit: 3654

of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

5. Claims 14, 15, 18 and 19 are rejected under 35 U.S.C. § 102(b) as being anticipated by Born. Born shows a method of enhancing safety of a stairlift installation comprising a rail (27) extending between upper end and lower ends of a staircase, a carriage (platform 19) moveable along the rail, and carriage operating controls remote from the carriage, the method comprising: providing a proximity sensor (sensor mats 98) to disable the carriage operating controls when a person is proximate the carriage. The proximity sensors are mounted proximate the carriage, at the boarding areas, as recited in claims 15 and 19.

6. Claims 14-16 and 18-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Muranaka in view of Born. Muranaka shows a method of enhancing safety of a stairlift installation comprising a rail (3) extending between upper end and lower ends of a staircase, and a carriage (chair 4) moveable along the rail. The method includes the automatic operating of lights (24) when a person is proximate the carriage. Muranaka varies from the claims by not having proximity sensors which disable the carriage's movements when a person approaches the carriage. Born shows a similar stair device with proximity sensors in the form of mats at the approaches to the lift to deactivate the power circuit should any pressure be placed on a mat to prevent injury, see column 2, lines 15-24. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the stair climbing chair of Muranaka with proximity sensing mats, to disable the chair from moving as the rider approaches and boards the chair, to prevent injuries, as taught by Born. Both of the control systems of Muranaka and Born have operating controls remote from the moving carriage, as recited in the preambles of claims 14 and 18. The motor controls on the carriage of Muranaka are considered as part of the sensor system, as to be mounted on the chair, as recited in claim 20. The proximity sensors are mounted proximate the carriage, at the boarding areas, as recited in claims 15 and 19. Muranaka has an occupancy sensor (23) to sense when a load is applied to the chair, as recited in claims 16 and 20-22.

7. Claims 17 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Muranaka in view of Born, as applied above to claim 16, and further in view of Tremblay et al. Muranaka, as modified, shows the basic claimed stair climbing chair system. It varies from the claims by not having a folding seat with a sensor. Tremblay et al shows a similar stair device with folding chair and a safety interlock. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the stair climbing chair of Muranaka with folding seat, to occupy less space when unused, and with a safety interlock, for locking the seat and disabling the chairlift operations, as taught by Tremblay et al.

Art Unit: 3654

8. Claim 24 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Born. Using a capacitance type proximity sensor would have been an obvious design consideration which would not have been beyond the limits of one of ordinary skill in this art at the time the invention was made by applicant.

9. Claims 28 and 29, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Johansson in view of Born. Johansson shows a stairlift installation comprising a rail (2 and/or 3) extending between upper end and lower ends of a staircase, and a carriage (10) moveable along the rail. It varies from the claims by not having proximity sensors which disable the carriage's movements when a person approaches the carriage. Born shows a similar stair device with proximity sensors in the form of mats at the approaches to the lift to deactivate the power circuit should any pressure be placed on a mat to prevent injury, see column 2, lines 15-24. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the stair lift of Johansson with proximity sensing mats, to disable the lift from moving as the rider approaches and boards the carriage, to prevent injuries, as taught by Born. Both of the control systems of Johansson and Born have operating controls remote from the moving carriage, as recited in the preambles of claims 14 and 18. Johansson has a call switch to call the carriage, see column 3, lines 2-5, as recited in new claims 28 and 29.

10. Claims 30 and 31, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlsen in view of Born. Carlson shows a stairlift installation comprising a rail (2) extending between upper end and lower ends of a staircase, and a carriage (chair 4) moveable along the rail. It varies from the claims by not having proximity sensors which disable the carriage's movements when a person approaches the carriage. Born shows a similar stair device with proximity sensors in the form of mats at the approaches to the lift to deactivate the power circuit should any pressure be placed on a mat to prevent injury, see column 2, lines 15-24. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the stair climbing chair of Carlsen with proximity sensing mats, to disable the chair from moving as the rider approaches and boards the chair, to prevent injuries, as taught by Born. The sensing system of Born has operating controls remote from the moving carriage, as recited in the preambles of claims 14 and 18. The upper and lower ends of the staircase of Carlsen are not within one another's line of sight, see figure 1, as recited in new claims 30 and 31.

11. Applicant's remarks in the amendment filed March 3, 2008, state that Born does not suggest the subject matter as it only moves under the control box 108 which is mounted on and moves with the carriage. However this argument does not reflect the claim's broad limitations. The claim does not state that an operator control or a control box is mounted remotely. Also, it does not recite that *all* of the controls are remote from the carriage. The claim only states some "operating controls" are remote from the carriage. The term "operating controls" is much broader than the term "operator's control". Born clearly teaches that the electrical control system is mounted in control box 90, see column 6, lines 40-43. As shown in figure 1, the operating controls in box 90 are remote from the carriage. Other hydraulic controls are positioned remotely from the carriage. It should also be noted that the

Art Unit: 3654

limitation regarding remote placement of the controls is found only in the preambles of claims 14 and 18, and is not associated with the single method step found in the body of the claim 14 or in the limitation regarding the functioning of the proximity switch in the body of claim 18.

12. Applicant also argues that references of Born and Muranaka are directed to mutually exclusive structures which do not lend themselves to combination as put forth in rejection. This argument is not understood as both devices are clearly stair lifts. The safety feature of the stair lift of Born can be readily incorporated into the stair lift of Muranaka. Applicant's long discussion of the calling switches is also not understood as the previous claims did not include call switches.

13. The amendment necessitated the new grounds, accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Mr. Peter Cuomo, can be reached at (571) 272-6856. The fax number for all patent applications is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thomas J. Brahan/
Primary Examiner, Art Unit 3654